

## - WYNDD Element Occurrence Record -

*Agalinis tenuifolia var. parviflora***Slender False-foxglove****EO ID#:** 4233**Occurrence Number:** 5**Identification verified:** Y**Data Sensitive:** N**GRANK:** G5T4**Federal Status:****Agency Status:****SRANK:** S1**County:****Quad Name:****Survey Site:**

Goshen

Fort Laramie

**Centroid Latitude:** 421204N**Centroid Longitude:** 1043220W

<b>Town Range</b>	<b>Section</b>	<b>Meridian</b>	<b>Note</b>
026N064W	27	6P	SW4 of NW4
026N064W	28	6P	NE4, NE4 of NW4
026N064W	29	6P	SE4 of NE4

**Directions:**

Western High Plains; Fort Laramie National Historic Site, along the Laramie River east of the fort to the mouth, on both sides, and above mouth of Deep Creek; ca 1.5 air mi west-southwest of town of Ft. Laramie, ca 21 air mi west-northwest of Torrington.

**Estimated Representation Accuracy:** Very High ( >95% )**Locational Uncertainty:****Survey Date:** 2004-08-08**Last Observation Date:** 2004-08-05**First Observation Date:** 1994-08-08**EO Rank:** Excellent estimated viability**EO Rank Date:** 2003-09-05**EO Rank Comments:**

Large, extensive population.

**EO Data:**

Occurs in interrupted bands on both sides of Laramie River for ca 0.7 miles, more abundant on the north side, and also above mouth of Deer Creek.

2004-08-05: In early flower. Few plants (less than 75) surveyed in 3 additional areas by B. Heidel.

2003-09: In fruit and late flower. Occasional to locally abundant; in 6 main areas and 6 others, est. total of 2500-6000 plants; in generally higher numbers and densities on the north side of the river. Surveyed by B. Heidel and with A. Symstad on south side.

2003-08-28: Collected in flower by R. Dorn.

1994-08-30: Collected in flower by B.E. Nelson.

1994-08-08: Collected in flower by B.E. Nelson and David Reilly.

**EO Type:** Survey**General Description:**

Gravelly sand bars and flats along river and island margins, on moist soil in full sun, in graminoid vegetation mapped as riverine sandflats - bars sparse vegetation.

**Min. Elevation:** 4,220.00 feet 1,286.00 meters **Max. Elevation:** 4,240.00 feet 1,292.00 meters**Size of EO:** At least 1 acre occupied, often in very high densities.**Managed Area Name:**

FORT LARAMIE NATIONAL HISTORIC SITE

**General Comments:**

Lobelia siphilitica is present at many of the same colonies. Both species are almost restricted to that segment of river that has

shifted since the 1950 topo map was produced.

**Specimens:**

Nelson, B.E. (33586, 34621). 1994. RM.

Heidel, B. and A. Symstad. (2481). 2003. RM, FOLA.

Dorn, R. (9728). 2003. RM, FOLA.

**Reference(s):**

Nelson, B.E. (Ernie), Manager, Rocky Mountain Herbarium, Dept. of Botany, 3165, University of Wyoming, 1000 E. University Ave., Laramie, WY 82071. (307) 766-2236

Hartman, R. L. and B. E. Nelson. 1995. Final report on the general floristic inventory of the southern Powder River Basin and Eastern Plains, Wyoming. Unpublished report prepared for the BLM Wyoming State Office by the Rocky Mountain Herbarium.

Heidel, Bonnie. Botanist of Wyoming Natural Diversity Database. University of Wyoming, Dept. 3381, 1000 E. University Ave., Laramie, WY 82071.

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Best Source for Information:**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Element Occurrence Components (Source Feature Information):**

**ID#: 37476**      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 27 NW4; north side Laramie River

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel

**Observation Data:** Ca 60 plants in two groups. In fruit and late flower. Occurs with *Agrostis stolonifera*, *Spartina pectinata*, *Sphenopholis obtusata*, and *Verbena hastata*.

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**ID#: 37477**      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 27 NW4; north side Laramie River

**Observation Data:** No source feature data available.

**Observation Date:** 1994-08-30

**Observers:** B.E. Nelson

**Observation Data:** Collected in flower in Sec. 27. This could have corresponded with any of the polygons surveyed in this section in 2003-04 or to a separate area if this annual species shifts in its distribution over time. It is assigned to an existing polygon based on the hypothesis that occupied bands of habitat have stability over this duration.

**Observation Date:** 2003-08-28

**Observers:** R. Dorn

**Observation Data:** Collected in flower. Location documented by GPS in Universal Mercator without seconds, and this is among the likely locales. It falls near the section line between Sections 27-28.

**Observation Date:** 2003-09-05

**Observers:** Bonnie Heidel

**Observation Data:** Ca 300 plants. In fruit and late flower. Occurs with *Agrostis stolonifera*, *Spartina pectinata*, *Sphenopholis obtusata*, and *Verbena hastata*.

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**ID#: 37478**      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 27 NW4; south side Laramie River

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel and Amy Symstad

**Observation Data:** Less than 30 plants. In fruit and late flower. Occurs with *Agrostis stolonifera*, *Spartina pectinata*, *Sphenopholis obtusata*, and *Verbena hastata*.

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<b>ID#: 37479</b>	<b>Source Feature Descriptor:</b> Subpopulation - Survey <b>Locator:</b> 026N064W Sec 28 NE4; south side Laramie River <b>Observation Date:</b> 2003-09-04 <b>Observers:</b> Bonnie Heidel and Amy Symstad <b>Observation Data:</b> Small patch, less than 20 plants. In fruit and late flower. Occurs with <i>Agrostis stolonifera</i> , <i>Spartina pectinata</i> , <i>Sphenopholis obtusata</i> , and <i>Verbena hastata</i> .
<b>ID#: 37480</b>	<b>Source Feature Descriptor:</b> Subpopulation - Survey <b>Locator:</b> 026N064W Sec 28 NE4, 27 NW4; north side Laramie River <b>Observation Date:</b> 2003-09-05 <b>Observers:</b> Bonnie Heidel <b>Observation Data:</b> Ca 300+ plants. In fruit and late flower. Occurs with <i>Agrostis stolonifera</i> , <i>Spartina pectinata</i> , <i>Sphenopholis obtusata</i> , and <i>Verbena hastata</i> .
<b>ID#: 37481</b>	<b>Source Feature Descriptor:</b> Subpopulation - Survey <b>Locator:</b> 026N064W Sec 28 NE4; south side Laramie River <b>Observation Date:</b> 2003-09-04 <b>Observers:</b> B. Heidel and Amy Symstad <b>Observation Data:</b> 200-500 plants on backwater shore. In fruit and late flower. Occurs with <i>Agrostis stolonifera</i> , <i>Spartina pectinata</i> , <i>Sphenopholis obtusata</i> , and <i>Verbena hastata</i> .
<b>ID#: 37482</b>	<b>Source Feature Descriptor:</b> Subpopulation - Survey <b>Locator:</b> 026N064W Sec 28 NE4; island in Laramie River <b>Observation Date:</b> 2003-09-04 <b>Observers:</b> Bonnie Heidel and Amy Symstad <b>Observation Data:</b> At least 100 plants on island; not surveyed closely. In fruit and late flower. Occurs with <i>Agrostis stolonifera</i> , <i>Spartina pectinata</i> , <i>Sphenopholis obtusata</i> , and <i>Verbena hastata</i> .
<b>ID#: 37483</b>	<b>Source Feature Descriptor:</b> Subpopulation - Survey <b>Locator:</b> 026N064W Sec 28 NE4; south side Laramie River <b>Observation Date:</b> 2003-09-04 <b>Observers:</b> Bonnie Heidel and Amy Symstad <b>Observation Data:</b> 200-500 plants in high density. In fruit and late flower. Occurs with <i>Agrostis stolonifera</i> , <i>Spartina pectinata</i> , <i>Sphenopholis obtusata</i> , and <i>Verbena hastata</i> .
<b>ID#: 37484</b>	<b>Source Feature Descriptor:</b> Subpopulation - Survey <b>Locator:</b> 026N064W Sec 28 NE4; north side Laramie River <b>Observation Date:</b> 1994-08-08 <b>Observers:</b> B.E. Nelson and David Reilly <b>Observation Data:</b> Collected in flower in Sec. 27. This could have corresponded with any of the polygons surveyed in this section in 2003-04 or to a separate area if this annual species shifts in its distribution over time. It is assigned to an existing polygon based on the hypothesis that occupied bands of habitat have stability over this duration. <b>Observation Date:</b> 2003-09-05 <b>Observers:</b> Bonnie Heidel <b>Observation Data:</b> Ca 100 plants. In fruit and late flower. Occurs with <i>Agrostis stolonifera</i> , <i>Spartina pectinata</i> , <i>Sphenopholis obtusata</i> , and <i>Verbena hastata</i> .
<b>ID#: 37485</b>	<b>Source Feature Descriptor:</b> Subpopulation - Survey <b>Locator:</b> 026N064W Sec 28 NE4; island in Laramie River <b>Observation Date:</b> 2003-09-05 <b>Observers:</b> B. Heidel <b>Observation Data:</b> At least 50 plants on island; not closely surveyed. In fruit and late flower. Occurs with

**ID#: 37486**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 28 NE4; north side Laramie River  
**Observation Date:** 2003-09-04  
**Observers:** Bonnie Heidel  
**Observation Data:** Large subpopulation; est 300-1000 plants. In fruit and late flower. Occurs with Agrostis stolonifera, Spartina pectinata, Sphenopholis obtusata, and Verbena hastata.

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**ID#: 37489**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 28 NW4; north side Laramie River  
**Observation Date:** 2004-08-05  
**Observers:** Bonnie Heidel  
**Observation Data:** Less than 20 plants on small bar that is nearly cut off from the shoreline and will become a tiny island.

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**ID#: 37490**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 29 NE4; mouth of Deer Creek  
**Observation Date:** 2003-09-05  
**Observers:** Bonnie Heidel  
**Observation Data:** Fewer than 20 plants in late flower.  
**Observation Date:** 2004-08-04  
**Observers:** Bonnie Heidel  
**Observation Data:** Extant? No plants found; the removal of the adjoining beaver dam resulted in matted and trampled vegetation were the plants had been in the preceding year.

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**ID#: 37491**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 29 NE4; mouth of Deer Creek  
**Observation Date:** 2004-08-05  
**Observers:** Bonnie Heidel  
**Observation Data:** Few plants in early flower.

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**ID#: 37492**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 29 NE4; mouth of Deer Creek  
**Observation Date:** 2004-08-04  
**Observers:** Bonnie Heidel  
**Observation Data:** 10-50 plants in early flower.

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**Version Date:** 10/14/200

**Author:** Bonnie Heidel

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- WYNDD Element Occurrence Record -*Cyperus acuminatus***Short-point Flatsedge****EO ID#:** 6023**Occurrence Number:** 3**Identification verified:** Y**Data Sensitive:** N**GRANK:** G5**Federal Status:****Agency Status:****SRANK:** S1**County:****Quad Name:****Survey Site:**

Goshen

Fort Laramie

**Centroid Latitude:** 421158N**Centroid Longitude:** 1043148W

<b>Town Range</b>	<b>Section</b>	<b>Meridian</b>	<b>Note</b>
026N064W	27	6P	SE4 of NW4

**Directions:**

Western High Plains; Fort Laramie National Historic Site, on north side of Laramie River mouth at confluence with North Platte River, ca. 1.5 air miles west-southwest of Fort Laramie (town).

**Estimated Representation Accuracy:** High ( >80%, <=95% )**Locational Uncertainty:****Survey Date:****Last Observation Date:** 2004-09-20**First Observation Date:** 2004-09-20**EO Rank:** Verified extant (viability not assessed)**EO Rank Date:** 2004-09-20**EO Rank Comments:****EO Data:**

2004-09-20: Uncommon in one patch. Collected in fruit by R. Dorn.

**EO Type:** Specimen**General Description:**

Flats in floodplain above shore of Laramie River.

<b>Min. Elevation:</b>	4,210.00 feet	1,283.21 meters	<b>Max. Elevation:</b>	feet	meters
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**Size of EO:****Managed Area Name:**

FORT LARAMIE NATIONAL HISTORIC SITE

**General Comments:****Specimens:**

Dorn, R. (10021). 2004. RM, FOLA.

**Reference(s):**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY. Rocky Mountain Herbarium. University of Wyoming, Department of Botany 3165, 1000 E. University Ave., Laramie, WY 82071. (307) 766-2236.  
Dorn, Robert D. Botanical Consultant, Mountain West Environmental Services, 8481 Rd. 39, Lingle, WY 82223.

**Best Source for Information:**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Element Occurrence Components (Source Feature Information):**

**ID#: 37420**                      **Source Feature Descriptor:** Population - Specimen

**Locator:** 026N064W Sec 27 NW4

**Observation Date:** 2004-09-20

**Observers:** Robert Dorn

**Observation Data:** Collected in fruit.

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**Version Date:** 11/8/2004

**Author:** B. Heidel

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## - WYNDD Element Occurrence Record -

*Cyperus bipartitus*

## Shining Flatsedge

EO ID#: 4761

Occurrence Number: 3

Identification verified: Y

Data Sensitive: N

GRANK: G5

Federal Status:

Agency Status:

SRANK: S1

County:

Quad Name:

Survey Site:

Goshen

Fort Laramie

Centroid Latitude: 421157N

Centroid Longitude: 1043148W

Town Range	Section	Meridian	Note
026N064W	27	6P	SE4 of NW4
026N064W	28	6P	NE4

## Directions:

Western High Plains; Fort Laramie National Historic Site, banks of the Laramie River on both sides, ca. 0.75 miles above confluence with the North Platte River, ca. 1.5 air miles west-southwest of Ft. Laramie (town).

Estimated Representation Accuracy: Very High ( &gt;95% )

Locational Uncertainty:

Survey Date: 2003-09-05

Last Observation Date: 2003-09-05

First Observation Date: 2003-09-04

EO Rank: Excellent estimated viability

EO Rank Date: 2003-09-05

## EO Rank Comments:

Large population spanning over 1 mile of habitat, but typically in low numbers and very small patches

## EO Data:

Occurs in at least 8 points or polygons spanning over 1 mile of river on both sides.

2003-09: In fruit, mostly in small groups of 10-50 plants on south side of Laramie River except for high numbers and densities of 1000+ above mouth of Laramie River on north side. Stature varies by habitat (2-15 cm; taller downstream). Surveyed by B. Heidel and with A. Symstad on south side.

EO Type: Survey

## General Description:

Gravelly sand flats and river margins that are inundated earlier in the season, in a zone that is mapped as riverine sand flats and bars with sparse vegetation. All subpopulations except those in Sec 27 are in linear bands at the river's edge.

Min. Elevation: 4,210.00 feet 1,283.21 meters Max. Elevation: 4,230.00 feet 1,289.00 meters

Size of EO: Much less than 1 acre occupied

## Managed Area Name:

FORT LARAMIE NATIONAL HISTORIC SITE

## General Comments:

This species is present in most of the same segments as *Lobelia siphilitica* and *Agalinus tenuifolia* but often closer to the river edge, and in very short, sparse vegetation. It is restricted to that segment of the Laramie River channel that has shifted since the 1950 topo map was produced. Population estimates are confounded by overtopping vegetation and species' branching pattern that makes it difficult to discern individuals.

## Specimens:

Heidel, B. and A. Symstad. (2487, 2488). 2003. RM, FOLA.

**Reference(s):**

Dorn, Robert D. Botanical Consultant, Mountain West Environmental Services, 8481 Rd. 39, Lingle, WY 82223.

Heidel, Bonnie. Botanist of Wyoming Natural Diversity Database. University of Wyoming, Dept. 3381, 1000 E. University Ave., Laramie, WY 82071.

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Best Source for Information:**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Element Occurrence Components (Source Feature Information):**

**ID#: 37501**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 28 NE4; south side Laramie River

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel and Amy Symstad

**Observation Data:** Small group of 10-50 plants. In fruit. Occurs with *Muhlenbergia asperifolia*, *Eleocharis palustris*, *Bidens cernua*, *Juncus torreyi*, *Xanthium strumarium*, and (in places) *Cyperus squarrosus*.

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**ID#: 37503**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 28 NE4; south side Laramie River

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel and Amy Symstad

**Observation Data:** Small group of 10-50 plants. In fruit. Occurs with *Muhlenbergia asperifolia*, *Eleocharis palustris*, *Bidens cernua*, *Juncus torreyi*, *Xanthium strumarium*, and (in places) *Cyperus squarrosus*.

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**ID#: 37504**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 28 NE4; south side Laramie River

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel and Amy Symstad

**Observation Data:** Small group of 10-50 plants. In fruit. Occurs with *Muhlenbergia asperifolia*, *Eleocharis palustris*, *Bidens cernua*, *Juncus torreyi*, *Xanthium strumarium*, and (in places) *Cyperus squarrosus*.

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**ID#: 37505**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 27 NW4; north side Laramie River above mouth

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel

**Observation Data:** 100's in high density. In fruit. Occurs with *Muhlenbergia asperifolia*, *Eleocharis palustris*, *Bidens cernua*, *Juncus torreyi*, *Xanthium strumarium*, and (in places) *Cyperus squarrosus*.

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**ID#: 37506**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 27 NW4; north side Laramie River above mouth

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel

**Observation Data:** Surveyed in fruit. Occurs with *Muhlenbergia asperifolia*, *Eleocharis palustris*, *Bidens cernua*, *Juncus torreyi*, *Xanthium strumarium*, and (in places) *Cyperus squarrosus*.

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**ID#: 37514**      **Source Feature Descriptor:** Subpopulation - Survey



**Locator:** 026N064W Sec 28 NE4; south side Laramie River

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel and Amy Symstad

**Observation Data:** Small group of 10-50 plants. In fruit. Occurs with *Muhlenbergia asperifolia*, *Eleocharis palustris*, *Bidens cernua*, *Juncus torreyi*, *Xanthium strumarium*, and (in places) *Cyperus squarrosus*.

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**ID#: 37533**      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 28 NE4; north side Laramie River

**Observation Date:** 2003-09-05

**Observers:** Bonnie Heidel

**Observation Data:** Small group of 10-50 plants. In fruit. Occurs with *Muhlenbergia asperifolia*, *Eleocharis palustris*, *Bidens cernua*, *Juncus torreyi*, *Xanthium strumarium*, and (in places) *Cyperus squarrosus*.

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**ID#: 37534**      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 28 NW4; south side Laramie River

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel and Amy Symstad

**Observation Data:** Few plants. In fruit. Represents the farthest upstream occurrence of rare species on Laramie River in FOLA, apart from Deer Creek subpopulations of other species. Occurs with *Muhlenbergia asperifolia*, *Eleocharis palustris*, *Bidens cernua*, *Juncus torreyi*, *Xanthium strumarium*, and (in places) *Cyperus squarrosus*.

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**Version Date:** 10/14/200

**Author:** B. Heidel

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## - WYNDD Element Occurrence Record -

*Dalea cylindriceps***Andean Prairie-clover****EO ID#:** 6068**Occurrence Number:** 5**Identification verified:** Y**Data Sensitive:** N**GRANK:** G3?**Federal Status:****Agency Status:****SRANK:** S1**County:****Quad Name:****Survey Site:**

Goshen

Fort Laramie

**Centroid Latitude:** 421231N**Centroid Longitude:** 1043340W

<b>Town Range</b>	<b>Section</b>	<b>Meridian</b>	<b>Note</b>
026N064W	29	6P	
026N064W	28	6P	
026N064W	21	6P	
026N064W	20	6P	SE4

**Directions:**

Western High Plains; Old Fort Laramie [likely within original national monument boundaries; ca 2 miles west of town of Fort Laramie.]

**Estimated Representation Accuracy:** High ( >80%, <=95% )**Locational Uncertainty:****Survey Date:****Last Observation Date:** 1949-07-15**First Observation Date:** 1949-07-15**EO Rank:** Historical**EO Rank Date:** 2004-12-18**EO Rank Comments:**

The habitat has been disked or plowed, and no longer fits the description in Davis (1959). The species is possibly extirpated.

**EO Data:**

1949-07-15: Collected in fruit by A.A. Beetle.

**EO Type:** Specimen**General Description:**

Not available.

**Min. Elevation:** 4,270.00 feet 1,301.50 meters **Max. Elevation:** feet meters

**Size of EO:****Managed Area Name:**

FORT LARAMIE NATIONAL HISTORIC SITE

**General Comments:****Specimens:**

Beetle, A.A. (6163). 1949. UW Dept of Renewable Resources. Originally determined as *Petalostemum compactum* and annotated by B. Heidel.

**Reference(s):**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Best Source for Information:**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Element Occurrence Components (Source Feature Information):**

**ID#: 37645**      **Source Feature Descriptor:** Population - Specimen

**Locator:** 026N064W Sec 20 SE4

**Observation Date:** 1949-07-15

**Observers:** A.A. Beetle

**Observation Data:** Collected in fruit.

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**Version Date:** 1/3/2005

**Author:** B. Heidel

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## - WYNDD Element Occurrence Record -

*Euphorbia hexagona***Six-angle Spurge****EO ID#:** 3026**Occurrence Number:** 5**Identification verified:** Y**Data Sensitive:** N**GRANK:** G5**Federal Status:****Agency Status:****SRANK:** S1**County:****Quad Name:****Survey Site:**

Goshen

Fort Laramie

**Centroid Latitude:** 421249N**Centroid Longitude:** 1043347W

Town Range	Section	Meridian	Note
026N064W	20	6P	SW4 of NE4
026N064W	17	6P	SE4 of SW4

**Directions:**

Western High Plains; ca. 1.3 miles west of Fort Laramie (town) and 0.7 miles northwest, in limited right-of-way segments along both sides of County Road 236, on east side of access road to canal, and scattered in rangeland bordered by these roads.

**Estimated Representation Accuracy:** Very High ( >95% )**Locational Uncertainty:****Survey Date:** 2004-08-04**Last Observation Date:** 2004-08-04**First Observation Date:** 2003-07-18**EO Rank:** Verified extant (viability not assessed)**EO Rank Date:** 2004-08-04**EO Rank Comments:****EO Data:**

Occur in at least 3 roadside right-of-way bands and in nearby rangeland.

2004-08-04: 45+ plants surveyed in flower and early fruit in two areas along county road by B. Heidel

2003-08-28: Collected in fruit by R. Dorn in native rangeland near canal road.

2003-07-18: Collected in flower and early fruit by B. Heidel and L. Lum along canal road.

**EO Type:** Survey**General Description:**

Gentle sandy slopes of roadsides and rangeland.

<b>Min. Elevation:</b>	4,300.00 feet	1,311.00 meters	<b>Max. Elevation:</b>	feet	meters
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**Size of EO:****Managed Area Name:**

BLM CASPER FIELD OFFICE

**General Comments:****Specimens:**

Heidel, B. (2389). 2003. FOLA.

Dorn, R. (9717). 2003. RM, FOLA.

**Reference(s):**

Dorn, Robert D. Botanical Consultant, Mountain West Environmental Services, 8481 Rd. 39, Lingle, WY 82223.

Heidel, Bonnie. Botanist of Wyoming Natural Diversity Database. University of Wyoming, Dept. 3381, 1000 E. University Ave., Laramie, WY 82071.

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Best Source for Information:**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Element Occurrence Components (Source Feature Information):**

**ID#: 37472**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 17 SW4; north side County Road 236

**Observation Date:** 2004-08-04

**Observers:** Bonnie Heidel

**Observation Data:** 5+ plants in flower and early fruit. Occurs with *Monroa squarrosa*, *Euphorbia*, *Croton texensis*, *Verbena hastata*, *Rumex venosus*, *Bromus tectorum*, *Ambrosia psilostachya*.

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**ID#: 37473**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 20 NE4; east side canal road

**Observation Date:** 2004-08-04

**Observers:** Bonnie Heidel

**Observation Data:** 10+ plants in flower and early fruit. Occurs with *Monroa squarrosa*, *Euphorbia*, *Croton texensis*, *Verbena hastata*, *Rumex venosus*, *Bromus tectorum*, *Ambrosia psilostachya*.

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**ID#: 37474**      **Source Feature Descriptor:** Subpopulation - Survey  
**Locator:** 026N064W Sec 20 NE4; south side County Road 236

**Observation Date:** 2003-07-18

**Observers:** Bonnie Heidel and Luanne Lum

**Observation Data:** Collected in flower and early fruit.

**Observation Date:** 2004-08-04

**Observers:** Bonnie Heidel

**Observation Data:** 30+ plants in flower and early fruit. Occurs with *Monroa squarrosa*, *Euphorbia*, *Croton texensis*, *Verbena hastata*, *Rumex venosus*, *Bromus tectorum*, *Ambrosia psilostachya*.

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**ID#: 37475**      **Source Feature Descriptor:** Subpopulation - Specimen  
**Locator:** 026N064W Sec 20 NE4

**Observation Date:** 2003-08-28

**Observers:** Robert Dorn

**Observation Data:** Scarce. Collected in fruit. Associated with *Brickellia* spp. and *Euphorbia* spp.

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**Version Date:** 10/14/200

**Author:** B. Heidel

## - WYNDD Element Occurrence Record -

*Lipocarpa drummondii***Dwarf Rush****EO ID#:** 5974**Occurrence Number:** 6**Identification verified:** Y**Data Sensitive:** N**GRANK:** G4G5**Federal Status:****Agency Status:****SRANK:** S1**County:****Quad Name:****Survey Site:**

Goshen

Fort Laramie

**Centroid Latitude:** 421156N**Centroid Longitude:** 1043148W

<b>Town Range</b>	<b>Section</b>	<b>Meridian</b>	<b>Note</b>
026N064W	27	6P	SE4 of NW4

**Directions:**

Western High Plains; Fort Laramie National Historic Site, on the Laramie River above confluence with North Platte River, ca. 1 mile southwest of Fort Laramie (town) on State Hwy. 160, ca. 0.6 miles south on a county road, and ca. 0.25 miles east on NPS trail along the north side of the Laramie River.

**Estimated Representation Accuracy:** High ( >80%, <=95% )**Locational Uncertainty:****Survey Date:****Last Observation Date:** 2004-08-24**First Observation Date:** 2004-08-24**EO Rank:** Verified extant (viability not assessed)**EO Rank Date:** 2004-08-24**EO Rank Comments:****EO Data:**

2004-08-24: Ca. 100 plants in one patch; collected in fruit by Robert Dorn.

**EO Type:** Specimen**General Description:**

Flats in floodplain above shore of Laramie River.

<b>Min. Elevation:</b>	4,200.00 feet	1,280.16 meters	<b>Max. Elevation:</b>	feet	meters
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**Size of EO:****Managed Area Name:**

FORT LARAMIE NATIONAL HISTORIC SITE

**General Comments:****Specimens:**

Dorn, R. (9952). 2004. RM, FOLA.

**Reference(s):**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.  
Dorn, Robert D. Botanical Consultant, Mountain West Environmental Services, 8481 Rd. 39, Lingle, WY 82223.

**Best Source for Information:**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Element Occurrence Components (Source Feature Information):**

**ID#: 37273**      **Source Feature Descriptor:** Population - Specimen

**Locator:** 026N064W Sec 27 NW4

**Observation Date:** 2004-08-24

**Observers:** R. Dorn

**Observation Data:** Ca. 100 plants in one patch. In fruit. Associated with *Cyperus aristatus* and *Salix exigua*.

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**Version Date:** 10/21/200

**Author:** B.A. Bonella

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## - WYNDD Element Occurrence Record -

*Lobelia siphilitica***Great Blue Lobelia****EO ID#:** 2850**Occurrence Number:** 4**Identification verified:** Y**Data Sensitive:** N**GRANK:** G5**Federal Status:****Agency Status:****SRANK:** S1**County:****Quad Name:****Survey Site:**

Goshen

Fort Laramie

**Centroid Latitude:** 421206N**Centroid Longitude:** 1043235W

Town Range	Section	Meridian	Note
026N064W	28	6P	NE4
026N064W	29	6P	SE4 of NE4

**Directions:**

Western High Plains; Fort Laramie National Historic Site, banks of the Laramie River, ca 0.5 miles upstream from bridge, ca 1.5 air miles west-southwest of town of Ft. Laramie; also above mouth of Deep Creek.

**Estimated Representation Accuracy:** Very High ( >95% )**Locational Uncertainty:****Survey Date:** 2003-09-05**Last Observation Date:** 2003-09-05**First Observation Date:** 1998-09-23**EO Rank:** Good estimated viability**EO Rank Date:** 2003-09-05**EO Rank Comments:**

Good population size and extent

**EO Data:**

Widely-scattered in sparse numbers in at least 9 points and polygons along 0.50 miles of river shore, plus Deer Creek outlier.

2003-09: Rare to occasional, with an estimated total of 200-300 plants scattered along 0.50 miles of river corridor, plus outlying colony above mouth of Deep Creek; more numerous on the south side. Surveyed in late flower and fruit by B. Heidel and A. Symstad.

1998-09-23: Collected in fruit and late flower by Robert Dorn.

**EO Type:** Survey**General Description:**

Gravelly sand bars and flats along river and island margins, in partial and full sun on moist loam, in graminoid vegetation of ca. same height, lying mostly within area mapped as riverine sand flats - bars sparse vegetation.

**Min. Elevation:** 4,220.00 feet 1,286.00 meters **Max. Elevation:** 4,240.00 feet 1,292.00 meters**Size of EO:** less than 1 acre occupied**Managed Area Name:**

FORT LARAMIE NATIONAL HISTORIC SITE

**General Comments:**

Agalinus tenuifolia is present at all subpopulations though not always at identical spots. Both species are almost restricted to that segment of the river channel that has shifted since the 1950 topo map.

**Specimens:**

Dorn, R. (7827). 1998. RM.



Heidel, B. and A. Symstad. (2485). 2003. RM, FOLA.

**Reference(s):**

Dorn, Robert D. Botanical Consultant, Mountain West Environmental Services, 8481 Rd. 39, Lingle, WY 82223.

Heidel, Bonnie. Botanist of Wyoming Natural Diversity Database. University of Wyoming, Dept. 3381, 1000 E. University Ave., Laramie, WY 82071.

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Best Source for Information:**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Element Occurrence Components (Source Feature Information):**

**ID#: 2847**                    **Source Feature Descriptor:** Subpopulation - Survey  
                                 **Locator:** 026N064W Sec 28 NE4; south side Laramie River

**Observation Date:** 1998-09-23

**Observers:** Robert Dorn

**Observation Data:** Collected in fruit and late flower. Occurs with Verbena and Salix.

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel and Amy Symstad

**Observation Data:** Surveyed in late flower and fruit. Occurs with *Agrostis stolonifera*, *Spartina pectinata*, *Agalinus tenuifolia*, *Potentilla anserina*.

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**ID#: 37493**                    **Source Feature Descriptor:** Subpopulation - Survey  
                                 **Locator:** 026N064W Sec 28 NE4; north side Laramie River

**Observation Date:** 2003-09-05

**Observers:** Bonnie Heidel

**Observation Data:** Ca 20 flowering plants. Occurs with *Agrostis stolonifera*, *Spartina pectinata*, *Agalinus tenuifolia*, *Potentilla anserina*.

---

**ID#: 37494**                    **Source Feature Descriptor:** Subpopulation - Survey  
                                 **Locator:** 026N064W Sec 28 NE4; south side Laramie River

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel and Amy Symstad

**Observation Data:** Ca. 100 flowering plants. Occurs with *Agrostis stolonifera*, *Spartina pectinata*, *Agalinus tenuifolia*, *Potentilla anserina*.

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**ID#: 37495**                    **Source Feature Descriptor:** Subpopulation - Survey  
                                 **Locator:** 026N064W Sec 28 NE4; island in Laramie River

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel and Amy Symstad

**Observation Data:** Over 10 flowering plants visible on island; not surveyed up close.

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**ID#: 37496**                    **Source Feature Descriptor:** Subpopulation - Survey  
                                 **Locator:** 026N064W Sec 28 NE4; south side Laramie River

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel and Amy Symstad

**Observation Data:** Ca. 25 flowering plants. Occurs with *Agrostis stolonifera*, *Spartina pectinata*, *Agalinus tenuifolia*, *Potentilla anserina*.

---

**ID#: 37497**                    **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 28 NE4; south side Laramie River

**Observation Date:** 2003-09-04

**Observers:** Bonnie Heidel and Amy Symstad

**Observation Data:** 50-100 flowering plants. Occurs with *Agrostis stolonifera*, *Spartina pectinata*, *Agalinus tenuifolia*, *Potentilla anserina*.

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**ID#: 37498**      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 28 NW4; island in Laramie River

**Observation Date:** 2003-09-05

**Observers:** B. Heidel

**Observation Data:** Ca 20 flowering plants. Occurs with *Agrostis stolonifera*, *Spartina pectinata*, *Agalinus tenuifolia*, *Potentilla anserina*.

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**ID#: 37499**      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 28 NW4; north side Laramie River

**Observation Date:** 2003-09-05

**Observers:** Bonnie Heidel

**Observation Data:** Ca 10 flowering plants. Occurs with *Agrostis stolonifera*, *Spartina pectinata*, *Agalinus tenuifolia*, *Potentilla anserina*.

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**ID#: 37500**      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 29 NE4; Deer Creek above mouth

**Observation Date:** 2003-09-03

**Observers:** Bonnie Heidel

**Observation Data:** About 5 plants observed below the Deer Creek bridge in late flower and fruit. Occurs with *Agrostis stolonifera*, *Spartina pectinata*, *Agalinus tenuifolia*, *Potentilla anserina*.

**Observation Date:** 2004-08-04

**Observers:** Bonnie Heidel

**Observation Data:** Extant? No plants found; the removal of the adjoining beaver dam resulted in matted and trampled vegetation where the plants had been in the preceding year.

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**Version Date:** 10/14/200

**Author:** Bonnie Heidel

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## - WYNDD Element Occurrence Record -

***Parthenium alpinum*****Alpine Fever-few****EO ID#:** 2020**Occurrence Number:** 35**Identification verified:** Y**Data Sensitive:** N**GRANK:** G3**Federal Status:****Agency Status:****SRANK:** S3**County:****Quad Name:****Survey Site:**

Goshen

Fort Laramie

**Centroid Latitude:** 421311N**Centroid Longitude:** 1043405W

Town Range	Section	Meridian	Note
026N064W	17	6P	SE4 of SW4, NW4 of SW4
026N064W	20	6P	NE4 of NW4

**Directions:**

Western High Plains; 3 air miles west-northwest of Fort Laramie (town), north of County Road 236 between Oregon Trail pull-off and Platte River valley.

**Estimated Representation Accuracy:** Very High ( >95% )**Locational Uncertainty:****Survey Date:** 2004-08-05**Last Observation Date:** 2004-08-05**First Observation Date:** 1995-05-10**EO Rank:** Good or fair estimated viability**EO Rank Date:** 2004-08-05**EO Rank Comments:**

Good condition and at least good-fair size.

**EO Data:**

Occasional to uncommon in at least three polygons of two different settings of limestone outcrops and cobble ridges in close proximity.

2004-08-05: Estimated at ca. 100 individuals in vegetative condition. Surveyed by B. Heidel as part of floristic documentation project.

2003-06-05: Collected in vegetative condition by R. Dorn as part of floristic documentation project.

1995-05-10: Collected in flower by R. Dorn.

**EO Type:** Survey**General Description:**

In two settings at high topographic positions, including the rim of the Platte valley with finger ridge outcrops on limey-sandstone ledges with *Cryptantha*, *Phlox hoodii*; and also across gentle ridgetops capped by alluvial cobble with *Stipa comata*.

**Min. Elevation:** 4,360.00 feet 1,328.93 meters **Max. Elevation:** 4,440.00 feet 1,353.31 meters

**Size of EO:** Population magnitude is at least in the 100's; full extent remains to be determined. Survey earlier in year is warranted.

**Managed Area Name:**

BLM CASPER FIELD OFFICE

**General Comments:****Specimens:**

Dorn, R. (5860). 1995. RM.

Dorn, R. (9697). 2003. RM, FOLA.

**Reference(s):**

Dorn, Robert D. Botanical Consultant, Mountain West Environmental Services, 8481 Rd. 39, Lingle, WY 82223.

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Best Source for Information:**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Element Occurrence Components (Source Feature Information):**

**ID#: 37463**      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 17 SW4, 20 NW4

**Observation Date:** 2003-06-05

**Observers:** Robert Dorn

**Observation Data:** Uncommon. Collected in vegetative condition. Occurs with *Cryptantha cana*, *Paronychia*.

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**ID#: 37464**      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 17 SW4

**Observation Date:** 1995-05-10

**Observers:** Robert Dorn

**Observation Data:** Collected in flower with white flower.

**Observation Date:** 2004-05-29

**Observers:** Bonnie Heidel

**Observation Data:** Uncommon, estimated at ca. 100 individuals. Observed in vegetative condition.

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**Version Date:** 10/25/200

**Author:** B. Heidel

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## - WYNDD Element Occurrence Record -

*Sorghastrum nutans***Indian Grass****EO ID#:** 5266**Occurrence Number:** 2**Identification verified:** Y**Data Sensitive:** N**GRANK:** G5**Federal Status:****Agency Status:****SRANK:** S1**County:****Quad Name:****Survey Site:**

Goshen

Fort Laramie

**Centroid Latitude:** 421151N**Centroid Longitude:** 1043408W

Town Range	Section	Meridian	Note
026N064W	29	6P	
026N064W	28	6P	SE4 of NE4

**Directions:**

Western High Plains; along WY Highway 160 southwest of Fort Laramie Historic Site, and on south shore of Laramie River in the designated Historic Site, 1-2 air miles southwest of Fort Laramie (town).

**Estimated Representation Accuracy:** Very High (>95%)**Locational Uncertainty:****Survey Date:** 2003-09-04**Last Observation Date:** 2003-09-04**First Observation Date:** 1992-09-09**EO Rank:** Verified extant (viability not assessed)**EO Rank Date:** 2003-09-04**EO Rank Comments:**

Extremely low population numbers in the riparian habitat; the nature of the occurrence warrants further consideration.

**EO Data:**

Rare on south shore of Laramie River in FOLA; also along roadside southwest of FOLA.

2003-09-04: (Laramie River) Two vigorous clumps in fruit surveyed by B. Heidel and A. Symstad.

2003-08-28: (Laramie River) Collected in fruit by R. Dorn.

1992-09-09: (Hwy 160 roadside) Collected in fruit by S. Kettler.

**EO Type:** Survey**General Description:**

Gravel roadside and saturated loam on south shore of river.

**Min. Elevation:** 4,220.00 feet 1,286.26 meters **Max. Elevation:** 4,265.00 feet 1,299.97 meters

**Size of EO:** Only two fruiting clumps were noted on the river but vegetative clumps may have been present.

**Managed Area Name:**

FORT LARAMIE NATIONAL HISTORIC SITE

**General Comments:**

The river shore subpopulations may or may not be indigenous. The roadside subpopulation may be accidental or fostered by disturbance.

**Specimens:**

Kettler, S. (s.n.). 1992. RM.

Dorn, R. (9726). 2003. RM, FOLA.

**Reference(s):**

Rocky Mountain Herbarium. University of Wyoming, Department of Botany 3165, 1000 E. University Ave., Laramie, WY 82071. (307) 766-2236.

Dorn, Robert D. Botanical Consultant, Mountain West Environmental Services, 8481 Rd. 39, Lingle, WY 82223.

Heidel, Bonnie. Botanist of Wyoming Natural Diversity Database. University of Wyoming, Dept. 3381, 1000 E. University Ave., Laramie, WY 82071.

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Best Source for Information:**

Heidel, B. 2004. Floristic inventory of Fort Laramie National Historic Site. Prepared for the National Park Service by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

**Element Occurrence Components (Source Feature Information):**

**ID#: 5263**                      **Source Feature Descriptor:** Subpopulation - Specimen

**Locator:** 026N064W Sec 29; Hwy 160 roadside

**Observation Date:** 1992-09-09

**Observers:** Steve Kettler

**Observation Data:** Collected in fruit.

**Observation Date:** 2003-09-05

**Observers:** Bonnie Heidel

**Observation Data:** Surveyed along roadside - not found.

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**ID#: 37465**                      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 28 NE4; Laramie River

**Observation Date:** 2003-08-04

**Observers:** Bonnie Heidel and Amy Symstand

**Observation Data:** Two robust, multi-stemmed clumps on shoreline, in fruit. Occurs with *Spartina pectinata*, *Solidago occidentalis*, *Verbena hastata*, small saplings of *Populus tremuloides*, and few *Salix exigua*.

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**ID#: 37466**                      **Source Feature Descriptor:** Subpopulation - Survey

**Locator:** 026N064W Sec 28 NE4; Laramie River

**Observation Date:** 2003-08-28

**Observers:** Robert Dorn

**Observation Data:** Rare. Collected in fruit. Associated with *Populus* spp., *Verbena* spp.

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**Version Date:** 11/6/2004

**Author:** B. Heidel